PROCEEDINGS OF THE
ROYAL ENTOMOLOGICAL SOCIETY
OF LONDON

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ANNUAL MEETING

WEDNESDAY, 21ST JANUARY, 1948, at 5.30 p.m.

AGENDA

1. Election of Officers and Council for 1948.
2. Council's Report.
3. Treasurer's Report, and
4. The President.

GENERAL MEETING

Wednesday, 21st January, to be held immediately on the conclusion of the Annual Meeting.

AGENDA

1. Confirmation of the Proceedings of the General Meeting held on 3rd December, 1947.
2. Recommendations of candidates for Fellowship.
3. Announcement of election of new Fellows.
4. Additions to the Library.

Purchased.

Staveley, E. F. *British Insects.* 8vo. London, 1871.

Stuldreher-Nienhuis, J. *Verborgen Paredijzen het leven en de Werken van Maria Sibylla Merian.* 8vo. Arnhem, 1945.

Verity, R. *Le Farfalle Diurne d'Italia.* Volume III. 4to. Florence, 1947.

Berland, L. *Faune de France. No.* 47, *Hyménoptères Tenthredoïdes.* 8vo. Paris, 1947.

Garneys, W. *The flora and fauna of Repton.* 8vo. London, 1881.

South-Eastern Union of Scientific Societies. *A survey and record of Woolwich and West Kent.* 8vo. Woolwich, 1909.

In addition, separates have been presented by Dr. C. B. Williams, Mr. G. S. Walley, Miss A. M. Melland, Dr. A. da Costa Lima, the United States Department of Agriculture, Dr. J. MacLeod, Mr. L. E. Couchman, the Council for Scientific and Industrial Research, Australia, the Reverend E. J. Pearce, Dr. W. Hennig, Mr. E. F. Gilmour, and Mr. J. B. Corporaal.

5. Admission of Fellows.

6. Communications.

(1) **Mr. R. L. E. Fard.**

A small collection of early entomological apparatus.

(2) **Mr. E. F. Gilmour.**

A Longicorn Beetle, *Trinophylum cribratum* Bates, new to Britain.

(3) **Dr. H. E. Hinton.**

The larva of *Micropteryx* Hubner (Zeugloptera)

[Abstract]

The larvae of *Micropteryx calthella* (L.) have recently been found in small numbers, and on the basis of these specimens it has been possible to investigate certain structural details which throw considerable light on the affinities of the Zeugloptera to the Trichoptera, Lepidoptera, and other members of the Panorpoid complex. The structure of the larvae supports the validity of the order Zeugloptera and shows that there are two principal groups in the Panorpoid complex : (1) Zeugloptera, Trichoptera, and Lepidoptera ; and (2) Mecoptera, Siphonaptera, and Diptera. In many respects, the family BOREIDAE is intermediate between these two series of Orders.

(4) Communications and exhibits, the titles of which have been received since the circulation of these agenda.

Fellows are particularly requested to bring suitable exhibits to the General Meetings even though it may not be possible to announce their intention to do so before the meeting.

If circumstances permit, tea will be served in the Library before the meeting.

NOTICES

A card index of Fellows' addresses arranged **on a geographical basis**, is now available for the use of Fellows in the Society's Rooms. Addresses in Great Britain are grouped under counties ; elsewhere under Dominions, Colonies, Foreign States, etc.

ADMISSION OF FELLOWS

Any Fellow who has not been formally admitted to the Society under Chapter XIV, Section 4 of the Bye-Laws and attends the meeting on 21st January, 1948, is requested to inform the Secretary before 5.15 p.m. on that date.

NOTICE OF FORTHCOMING MEETING.

The meeting on 4th February, 1948, will be devoted to a discussion to be opened by Dr. C. G. Butler and Dr. C. H. Ribbands on recent work on the sense physiology and behaviour of the honey bee. Fellows of the Society having relevant observations of interest are warmly invited to bring them to the attention of the meeting.

PROCEEDINGS OF THE GENERAL MEETING HELD ON 3RD DECEMBER, 1947

Dr. C. B. Williams, M.A., President, in the Chair.

Present, 84 Fellows and 39 Visitors.

The minutes of the meeting held on 19th November, 1947, were confirmed by the meeting and signed by the President.

The names of the following candidates for election were read :—

For the first time : J. Armitage, A. Diakonoff, J. D. H. Hillaby, Rev. Desmond Murray, and D. W. Williams, M.Sc., Ph.D.

For the second time : J. D. Bletchly, B.A., B.Sc., M. Armstrong, M.A., B.Sc., T. W. Cameron, M.B., Ch.B., Arthur Jones, H. S. Robinson, G. R. Whitehead, and J. J. Williams.

The Secretary read the names of the following newly elected Fellows of the Society : W. J. Burley, 29, Trelowarren Street, Camborne, Cornwall ; C. A. W. Duffield, M.C., J.P., Pickersdane, Brook, near Ashford, Kent ; Dr. G. H. Lowe, Fernleigh, Robin Hood's Bay, N. Yorks ; J. P. Stevenson, 37, Montpelier Road, Purley, Surrey ; Trevor Trought, M.A., Brookland, Tysoe, Warwickshire.

Thanks were voted to donors of gifts to the Library since the last meeting.

Mr. J. P. Stevenson, Capt. D. Baker, Mr. R. M. Handfield-Jones, Mr. R. H. Curle, Mr. E. F. Gilmour, Mr. B. O. C. Gardiner, Mr. W. L. Rudland, Mr. D. W. Empson, Mr. B. A. Cooper, and Dr. J. McGarvey signed the Obligation Book and were admitted Fellows of the Society.

The Secretary read for the second time the nominations for Officers and Council for 1948.

The meeting, which was opened by Professor A. C. Hardy, F.R.S., was devoted to a discussion on the dispersal of insects by wind and air currents. A brief abstract of Professor Hardy's remarks appeared on page 45.

Mr. P. S. Milne discussed a method of trapping by means of a net attached to a goods train brake van, illustrating his remarks and the results obtained with lantern slides.

Mr. J. A. Freeman described trapping from wireless masts at various heights, and Dr. C. G. Johnson described trapping experiments carried out from captive balloons at Cardington.

In the discussion which followed, Dr. I. Thomas (a visitor) enquired whether there had been any investigation of the relative abundance of the insects at their places of origin and where caught. In replying, Mr. Freeman said that in order to supply this information it would be necessary to carry out detailed and closely timed experiments over a short period of time when conditions were static, and the only information available had been collected over too long a period.

Dr. Thomas also asked about the killing of the insects caught, particularly those at the mouth of the trap. Professor Hardy said that nearly all the insects were in the last third of the net, and the whole of this was placed in the tube. Dr. Johnson mentioned that, as the nets used from captive balloons would not go into a killing bottle, they were sprayed with pyrethrum immediately after being hauled down.

Professor Hardy said it was hoped, by co-operation with lightships on the continental North Sea coast, to assess the numbers of insects leaving that coast.

Dr. J. S. Kennedy enquired whether the proportion of native to foreign aphids attacking crops in this country was known. Dr. D. Hille Ris Lambers said, in answer, that the important aphid pests in this country were the same as in Holland.

Dr. Williams said the Thrips (*Limothrips cerealium*), obtained so freely by Mr. Milne in his experiments, feed on corn and wheat during the early summer, and leave the wheat as it ripens, and are therefore at their peak flight at the end of July.

Miss Longfield mentioned that she thought a goods train travelling at twenty-five miles an hour was rather fast, and that many insects would be lifted into the bag by suction, but Mr. Milne pointed out that the net was ten feet from the ground, and there was no herbage on the track below.

Mr. R. B. Freeman enquired whether any non-indigenous species were found. He had himself carried out experiments on the contents of the stomachs of swifts, and in one case a spider not native to the area had been found.

Dr. J. MacLeod enquired what proportion of large insects were in the train trap, to which Mr. Milne replied that few large insects were caught, probably because they were better able to evade the trap. A faster train would probably mean more large insects.

Dr. Uvarov said vertical convection air currents start the original upward movement of insects, but the presence of a strong wind keeps them on the ground.

Mr. R. A. Davis recalled an instance in Syria of a prevailing wind and up-current of air carrying mosquitoes ten miles from their place of origin.

N. D. RILEY, *Hon. Secretary.*

The next meeting will be held on Wednesday, 4th February, 1948, at 5.30 p.m.

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